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REMARKS

Preliminarily, Applicant requests entry and consideration of the Amendments set forth above. The above amendments were originally presented in an Amendment/Response to Telephone Interview(s) filed November 2, 2003 and, as verbally indicated by the Examiner, was not received by the Examiner prior to preparation of the Office Action mailed November 6, 2003. As such, Applicant has re-presented the above amendments for entry and consideration. Moreover, the above amendments have been made at the request of the Examiner to clarify certain elements of the claims that the Examiner believed unclear. The above amendments have not been made to define the present invention over the art of record or make the claims compliant with any outstanding statutory provisions. Simply, it is believed that the claims, without the present amendments, define over the art of record and comply with the statutory requirements of Title 35 of the U.S. Code.

Responsive to the November 6, 2003 Office Action, Applicant appreciates the Examiner indication that the rejection(s) based on Dietrich et al. have been withdrawn. Applicant also appreciates the Examiner's indication that the objection to the Declaration filed April 18, 2003 has been withdrawn. The Examiner has also withdrawn the rejection(s) based on Yoshitome H6-311977 and Machida. Such withdrawal is appreciated. Applicant likewise appreciates the Examiner's indication that the objection to the drawings has been withdrawn.

The Examiner has provisionally rejected claims 1, 5-8, 10, 12-18, 20, 22, 24-26, and 29 under the judicially created doctrine of double patenting over claims 1, 10-14, 16-18, 21, 24, 30, and 39 of U.S. Ser. No. 10/235,454. Given that the claims of U.S. Ser. No. 10/235,454 have not been patented, it would be premature for Applicant to respond to the *provisional* rejection and Applicant is not required to do so. See MPEP §804.

The Examiner rejected claim 30 under 35 U.S.C. §112 as failing to have antecedent basis for "selecting a larger slab thickness than that used for imaging" on the premise that claim 22, from which claim 30 depends, does not recite a slab thickness used for imaging. Additionally, the Examiner is troubled because Applicant defines "optimal imaging volume" to be distinct from "slab thickness" in the disclosure and, as a result, the Examiner has concluded that "at least one method step which provides proper antecedent basis is missing from claim 30." Additionally, the Examiner kindly points out that:

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"if applicant resolves the antecedent basis problem applicant by amendment there will still be an issue of which slab thickness the applicant uses to determine the 'overlapping data set' because the relevance of the Prior art, and the last feature of claim 30 is dependent upon a proper clarification of which slab thickness is overlapped." Office Action (11/6/2003), ¶13, p. 6.

Before responding to the rejections to claim 30, Applicant must offer the following prefatory comments. Through prosecution of the present application and in light of statements such as those set forth at paragraph 13 on page 6 of the November 6, 2003, it has become patently clear that the Examiner wishes to be the author of the claims under review given the Examiner's assertion that elements necessary to the understanding of the claimed invention have been omitted. That is, Applicant has the read the claims to be lacking critical features based solely on the Examiner's belief that the claim is unclear. The Examiner has not provided any support that one skilled in the art would find the language of the claims unclear.

For example, claim 30 calls for a set of instructions that when executed cause a computer to, in part, "select a larger slab thickness than that used for imaging". The Examiner has concluded that claim 30 is indefinite because claim 22 does not call for "a slab thickness used for imaging". The Examiner's assertion that language similar to "a slab thickness used for imaging" is required in claim 22 to make claim 30 definite is nonsensical. One skilled in the art reading claim 30 would readily draw the conclusion that to select a larger slab thickness than that used for imaging means to simply select a slab thickness larger than whatever was used for imaging. There is nothing unclear about the limitation. By definition, the limitation is unconcerned with the slab thickness used for imaging. The limitation only requires that the computer select a slab thickness larger than whatever was used for imaging. The meaning of the limitation is clear. The claim is definite.

Additional examples may be found in claim 30. For instance, the Examiner states that "repetitiously acquiring MR data for the larger slab thickness" lacks antecedent basis. A reading of the claim, however, illustrates the Examiner's continued nonsensical approach to the examination process. This can be readily seen in the underlined portions of claim 30 which has been reproduced in its entirety below:

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30. The computer program of claim 22 wherein the k-space data includes MR data, and having further instructions to:

select <u>a larger slab thickness</u> than that used for imaging; repetitiously acquire MR data for <u>the larger slab thickness</u> in a direction of table movement;

determine a set of overlapping MR data; and estimate at least one of table velocity and table position from the set of overlapping MR data.

As the underscored portions clearly reveal, "a larger slab thickness" has been defined and positively claimed and the repetitious acquisition of MR data is for "the larger slab thickness". One skilled in the art would not find the claim indefinite and Applicant is unclear as to how the Examiner drew such a conclusion.

Also set forth in the rejection of claim 30 the Examiner notes that "Applicant also defines 'optimal image volume' to be distinct from 'slab thickness' in the disclosure therefore at least one method step which provides proper antecedent basis is missing from claim 30..." Applicant finds the Examiner's statement puzzling give that neither claim 22 nor claim 30 call for "optimal image volume". Additionally, Applicant agrees that the disclosure of the invention sets forth distinctions between optimal imaging volume and slab thickness, but Applicant is unclear as to what bearing that has on the definiteness of claim 30. Further, the Examiner has not indicated with any clarity what step of the method the Examiner believes to be "missing".

In the rejection of claim 30, the Examiner states that there is antecedent basis issue with respect to "overlapping data set". A reading of claim 30 clearly illustrates that the Examiner's confusion and assertions are unsupported. For purposes of clarity, claim 30 has again been reproduced in its entirety below.

30. The computer program of claim 22 wherein the k-space data includes MR data, and having further instructions to:

select a larger slab thickness than that used for imaging; repetitiously acquire MR data for the larger slab thickness in a direction of table movement;

determine a set of overlapping MR data; and estimate at least one of table velocity and table position from the set of overlapping MR data.

As explicitly stated in the claim, MR data is acquired from a larger slab thickness than that used for imaging. The claim also calls for the determination of a set of overlapping MR data. From

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the MR data acquired from the larger slab, a set of overlapping MR data is acquired. The Examiner asserts that it is unclear which slab the overlapping data comes from. However, one skilled in the art will readily appreciate that for the MR data to be overlapping it must come from at least the larger slab thickness; otherwise, the MR data would not be overlapping. Contrary to the conclusion reached by the Examiner, one skilled in the art would readily be able to ascertain the invention as defined by claim 30.

The Examiner has rejected claims 1-30 under 35 U.S.C. §102(f) "because the applicant did not invent the claimed subject matter." The Examiner stated that "the lack of John M. Pauly as an inventor of the instant application in a continuation application is the cause of the inventorship issue." As has been previously explained to the Examiner, the present application is a continuation-in-part of U.S. Ser. No. 09/681,420. The inventive entity of '420 is Jean H. Brittain and John M. Pauly. The present invention has only Jean H. Brittain as an inventor. Such is permissible given that there is at least one common inventor between the two applications.

Moreover, the present application is the parent application of U.S. Ser. No. 10/235,454. That is, '454 is a continuation of the present application. Application '454 has Jean H. Brittain and John M. Pauly as inventors. Since '454 and the present have at least one common inventor, '454 can claim priority of the present application.

It appears the Examiner has concluded there is an inventorship issue because the Examiner has failed to recognize that the claims of the application define inventorship. Moreover, each listed inventor is not required to be an inventor for each claim. It is the claims as a whole that define inventorship. See MPEP §2137.01. Accordingly, the claims of the present application mandate that only Jean H. Brittain be listed as an inventor. In contrast, the claims of '420 and '454 mandate that both Jean H. Brittain and John M. Pauly be listed as inventors. Further, MPEP §706.02(g) mandates that "the examiner must presume the applicants are the proper inventors unless there is proof that another made the invention and that applicant derived the invention from the true inventor". Since the Examiner has failed to satisfy the burden imposed by MPEP §706.02(g), Applicant request withdrawal of the rejection.

The Examiner has rejected claims 1-30 under 35 U.S.C. §103(a) as being unpatentable over Kruger et al. (U.S. Pub. 2002/0173715A1). The Examiner cited Kruger et al. as prior art based on its claiming the benefit of a provisional application filed April 9, 2001. Since the reference is only available to be cited against the present application because of its April 9, 2001 effective date, Applicant hereby requests and is entitled to a copy of the provisional

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application to which Kruger et al. claims the benefit. Only from a review of the provisional application can a determination be made as to whether Kruger et al. was, in fact, in possession on April 9, 2001 of that disclosed in the non-provisional publication. Additionally, since Applicant has not been heretofore afforded an opportunity to review U.S. Ser. No. 60/282,555, Applicant requests that any action taken by the Patent Office be non-final.

Notwithstanding Applicant's lack of access to U.S. Ser. No. 60/282,555, Applicant has elected to antedate the reference as permitted by 37 CFR 1.131 and MPEP §715. Accordingly, Applicant refers the Examiner to the Affidavit enclosed herewith. Withdrawal of the rejection based on Kruger et al. is requested.

Applicant has directed the cancellation of claims 13-15.

Therefore, in light of the foregoing, Applicant respectfully believes that the present application is in condition for allowance. Accordingly, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-12 and 16-30.

Applicant appreciates the Examiner's consideration of these Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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Dated: December 15, 2003

Attorney Docket No.: GEMS8081.060

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